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ARIER MANAGES OF ANTIFICA

TO ALL TO WHOM THESE PRESENTS SHALL COME:

Asgrow Seed Company

Telliereas, there has been presented to the

Secretary of Agriculture

AN APPLICATION REQUESTING A CERTIFICATE OF PROTECTION FOR AN ALLEGED NOVEL VARIETY OF SEXUALLY REPRODUCED PLANT, THE NAME AND DESCRIPTION OF WHICH ARE CONTAINED IN THE APPLICATION AND EXHIBITS, A COPY OF WHICH IS HEREUNTO ANNEXED AND MADE A PART HEREOF, AND THE VARIOUS REQUIREMENTS OF LAW IN SUCH CASES MADE AND PROVIDED HAVE BEEN COMPLIED WITH, AND THE TITLE THERETO IS, FROM THE RECORDS OF THE PLANT VARIETY PROTECTION OFFICE, IN THE APPLICANT(S) INDICATED IN THE SAID COPY, AND WHEREAS, UPON DUE EXAMINATION MADE, THE SAID APPLICANT(S) IS (ARE) ADJUDGED TO BE ENTITLED TO A CERTIFICATE OF PLANT VARIETY PROTECTION UNDER THE LAW.

NOW, THEREFORE, THIS CERTIFICATE OF PLANT VARIETY PROTECTION IS TO GRANT UNTO THE SAID APPLICANT(S) AND THE SUCCESSORS, HEIRS OR ASSIGNS OF THE SAID APPLICANT(S) FOR THE TERM OF SOURCEON YEARS FROM THE DATE OF THIS GRANT, SUBJECT TO THE PAYMENT OF THE REQUIRED FEES AND PERIODIC REPLENISHMENT OF VIABLE BASIC SEED OF THE VARIETY IN A PUBLIC REPOSITORY AS PROVIDED BY LAW, THE RIGHT TO EXCLUDE OTHERS FROM SELLING THE VARIETY, OR OFFERING IT FOR SALE, OR REPRODUCING IT, IMPORTING IT, OR EXPORTING IT, OR USING IT IN PRODUCING A HYBRID OR DIFFERENT HETY THEREFROM, TO THE EXTENT PROVIDED BY THE PLANT VARIETY PROTECTION ACT AT. 1542, AS AMENDED, 7 U.S.C. 2321 ET SEQ.)

PEA

'Lotus'

In Lestimony Eurorcot, I have hereunto set my hand and caused the seal of the Plant Variety Protection Office to be affixed at the City of Washington this 15th day of September in the year of our Lord one thousand nine hundred and seventy-seven

Commissioner Plant Variety Protection Office Grain Division Agricultural Marketing Service

Atlast:

Secretary of Agriculture

FORM APPROVED OMB NO. 40-R3712

UNITED STATES DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE GRAIN DIVISION PLANT VARIETY PROTECTION OFFICE NATIONAL AGRICULTURAL LIBRARY BELTSVILLE, MARYLAND 20705

INSTRUCTIONS: See Reverse. 1a. TEMPORARY DESIGNATION OF	1b. VARIETY NA	1b. VARIETY NAME		FOR OFFICIAL USE ONLY	
VARIETY	,	5 HJ 9/7/77	PV NUMBE 77000		
XP-F66	LOTOS	71-15 1/1/7/	77000	12	
2. KIND NAME	3. GENUS AND S	SPECIES NAME	5-31-77	TIME 100 A.M.	
Garden Pea	Pisum sa	tivum	FEE_RECEIVED	DATE	
4. FAMILY NAME (BOTANICAL)	5. DATE OF DET		1: 250-	5-31-77	
			1 250-	5-31-17	
Leguminosae	July, 19	July, 1973		9-7-77	
6. NAME OF APPLICANT(S)	7. ADDRESS (Stre Code)	et and No. or R.F.D. No.,	City, State, and ZIP	8. TELEPHONE AREA CODE AND NUMBER	
Asgrow Seed Company	Kalamazoo	Kalamazoo, Michigan 49001		(616) 385-6605	
9. IF THE NAMED APPLICANT IS NOT A P ORGANIZATION: (Comporation, partnership		10. IF INCORPORAT DATE OF INCOR	ED, GIVE STATE AND PORATION	11. DATE OF INCOR- PORATION	
Corporation		Delaware		March 22, 1968	
12. Name and mailing address of appl	icant representativ	ve(s), if any, to serve	in this application as	nd receive all papers	
7000 Portage Road Unit 9630-190-1 Kalamazoo, Michigan 4900 13. CHECK BOX BELOW FOR EACH ATTA 13A. Exhibit A, Origin and Bree 13B. Exhibit B, Novelty Staten 13C. Exhibit C, Objective Desc 13D. Exhibit D, Additional Description (See Section 83(a). (If "Yes," answers.")	eding History of the nent. ription of the Variet scription of the Variet scription of the Variet wer 14B and 14C be	Variety (See Section 52 ty (Request form from 1 ety. e sold by variety name of low.)	Plant Variety Protection only as a class of certific YES XX NO	n Office.) ed seed?	
14B. Does the applicant(s) specify that the limited as to number of generation	this variety be s?	breeder seed?	now many generations o	of production beyond	
	YES NO	FOUNDATION	REGISTERED	CERTIFIED	
15. Does the applicant(s) agree to the p	publication of his/he	er (their) name(s) and ad	dress in the Official Jou	urnal?	
16. The applicant(s) declare(s) that a v a certificate and will be replenished	riable sample of basi I periodically in acco	c seed of this variety will ordance with such regula	ll be deposited upon rec ations as may be applica	quest before issuance of able.	
The undersigned applicant(s) is (a variety is distinct, uniform, and s tion 42 of the Plant Variety Act.	are) the owner(s) of table as required in	this sexually reproduce Section 41, and is enti-	ed novel plant variety, tled to protection unde	and believe(s) that the r the provisions of Sec-	
Applicant(s) is (are) informed that	false representation	herein can jeopardize pi	rotection and result in 1	penalties.	
3-9-17					
(DATE)	<u> </u>	Jo	a- <i>B athle</i> (SIGNATURE OF APPLI ohn A. Batcha	00001	
(DATE)		-	(SIGNATURE OF APPLI	CANT)	

INSTRUCTIONS

GENERAL: Send an original copy of the application, exhibits and \$250.00 fee to U.S. Dept. of Agriculture, Agricultural Marketing Service, Grain Division, National Agricultural Library, Beltsville, Maryland 20705. (See Section 180.175 of the regulations and rules of practice.) Retain one copy for your files. All items on the face of the form are self-explanatory unless noted below.

TTEM

- Give the date the applicant determined that he had a new variety based on (1) the definition in Section 41(a) of the Act and (2) the date a decision was made to increase the seed.
- Give (1), the genealogy, including public and commerical varieties, lines, or clones used, and the breeding method. (2), the details of subsequent stages of selection and multiplication. (3), the type and frequency of variants during reproduction and multiplication and state how these variants may be identified and (4), evidence of stability.
- Give a summary statement of the variety's novelty. Clearly state how this novel variety may be distinguished from all other varieties in the same crop. If the new variety most closely resembles one or a group of related varieties; (1) identify these varieties and state all differences objectively; (2) Attach statistical data for characters expressed numerically and demonstrate that these differences are significant; and (3) submit, if helpful, seed and plant specimens or photographs of seed and plant comparisons clearly indicating novelty.
- 13c Fill in the Exhibit C, Objective Description form for all characteristics, for which you have adequate data.
- Describe any additional characteristics that are not described, or whose description cannot be accurately conveyed in Exhibit C.

 Use comparative varieties as is necessary to reveal more accurately the description of characteristics that are difficult to describe; such as; plant habit, plant color, disease resistance, etc.

14A If "YES" is specified (seed of this variety be sold by variety name only as a class of certified seed) the applicant may NOT reverse his affirmative decision after the variety has either been sold and so labeled or published or the certificate has been issued. However, if the applicant specifies "NO", he may change his choice. (See Section 180.15 of the Regulations and Rules of Practice.)

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EXHIBIT A-Origin and Breeding History of XP-F66 Pea

The original cross, M410 x Venus, was made in 1967, and $\frac{\text{LOTUS}}{\text{XP-F66}}$ has been developed by straight selection from this cross. Single plant selections were made through F_6 in 1972. In July, 1973, a decision was made that this line was unique and that it was worthy of increase and extensive trials. It was designated as $\frac{\text{XP-F66}}{\text{LOTUS}}$ in January, 1975.

XP F66 has been in replicated trials at the Asgrow Research Center since 1974, and during that time, the line has been increased and refined through mass selection. As a final check on homozygosity, approximately 400 progenies were grown from single plant selections. These progenies were carefully evaluated several times during the growing season, and there was very little variation between the progenies. However, any progeny suspect in any way at any inspection was eliminated. When the seed matured, the field was harvested and this has become our Breeder's seed.

LOTUS $\frac{XP-F66}{XP-F66}$ is to our knowledge, a stable, true breeding line. We have found no variants in the Breeder's seed.

JDA 1/6/77 The commercial pea variety most similar to $\frac{\text{LOTUS}}{\text{XP-F66}}$ to our knowledge is Venus. Comparative characteristics which make $\frac{\text{XP-F66}}{\text{XP-F66}}$ a different variety include, but are not restricted to, the following:

LOTUS
1. XP F66 produces three flowers and two or three pods per node; whereas, Venus is strictly double-flowered and produces one or two pods per node.

JDA 1/6/77 FORM GR-470-14 (5-15-74)

UNITED STATES DEPARTMENT OF AGRICULTURE AGRICULTURAL MARKETING SERVICE GRAIN DIVISION

ЕХНІВІТ С (Реа)

HYATTSVILLE, MARYLAND 20782 OBJECTIVE DESCRIPTION OF VARIETY

PEA (PISUM SATIVUM)	
NAME OF APPLICANTIS)	VARIETY NAME OR TEMPORARY
Asgrow Seed Company	DESIGNATION
ADDRESS (Street and No. or R.F.D. No., City, State, and ZIP Code)	LOTUS XP-F66
	FOR OFFICIAL USE ONLY
	PVPO NUM9F700072
Kalamazoo, Michigan 49001	I
Place the appropriate number that describes the varietal character in the boxes below.	
Place a zero in first box (e-g. 0 8 9 or 0 9) when number is either 99 or less c	or 9 or less.
1. TYPE:	, •
1 1 = GARDEN 2 = FIELD 3 = EDIBLE-PODDED	•
2. MATURITY:	
1 2 Node number of first bloom: 0 7 0 No. of days to processing	1 3 2 5 Heat Units
No. of days Earlier than	S LAXTON WR 3 = LITTLE MARVEL
0 3 No. of days Later than 3 4 = WANDO 5 = ALDERMAN W	/R 6 = AUSTRIAN WINTER
3. PLANT HEIGHT:	
0 6 3 cm. нідн	
Cm. Shorter than	S LAXTON WR 3 = LITTLE MARVEL
0 3 Cm. Taller than	/R 6 = AUSTRIAN WINTER
4. VINE:	
	= SLIM (Alaska) 3 = HEAVY (Alderman) = MEDIUM (Thomas Laxton WR)
2 Branching: 1 = NONE (Alaska) 2 - 1-2 BRANCHES (Little Marvel) 3 = MOR	E THAN 2 BRANCHES (Dwarf Gray Sugar
2 Internodes: 1 = STRAIGHT 2 = ZIG ZAG 1 7 NUMBER O	F NODES
5. LEAFLETS:	
1 = LIGHT GREEN (Alaska WR) 2 = MED. GREEN (Thomas Laxton WR Color: 4 = OTHER (Specify)) 3 ≈ DARK GREEN (Alderman)
2 Wax: 1 = NONE 2 = LIGHT 3 = MEDIUM 4 = HEAVY 2 1 = NOT MARE	BLED 2 = MARBLED (Alaska)
Number of leaflet pairs: 1 = NOT PAIRED 2 = ONE 3 = TWO 4 = T	HREE OR MORE
6. STIPULES:	
2 1 = LACKING 2 = PRESENT 1 = NOT CLASS	PING 2 = CLASPING
2 1 = NOT MARBLED 2 = MARBLED 3 Size (Compared	1 = SMALLER 2 = SAME with leaflets): 3 = LARGER
2 Color (Compared with leaflets): 1 = LIGHTER 2 = SAME 3 = DARKER	
7. FLOWER COLOR:	· · · · · · · · · · · · · · · · · · ·
	HITE 2 = GREENISH 3 = LAVENDER JRPLE 5 = RED

6 = OTHER (Specify)

8. PODS:	7700072
Shape:	1 = STRAIGHT 2 = SLIGHTLY CURVED 3 = CURVED 2 End: 1 = POINTED (Alderman) 2 = BLUNT (Alaska)
3 Color:	1 = LIGHT GREEN (Alaska WR) 2 = MEDIUM GREEN 3 = DARK GREEN (Alderman) 4 = OTHER (Specify)
1 Surface:	1 = SMOOTH 2 = ROUGH 1 Surface: 1 = SHINY 2 = DULL
5 Borne:	1 = SINGLE 2 = DOUBLE 3 = SINGLE AND DOUBLE 4 = SINGLE, DOUBLE, & TRIPEE 5 = DOUBLE & TRIPLE 6 = TRIPLE 7 = OTHER (Specify)
0 6 cm.	LENGTH 1 3 MM. WIDTH (Between sutures) 0 6 NO. SEEDS PER POD
9. SEEDS (95-10	O Tenderometer):
3 Colo	r: 1 = LIGHT GREEN 2 = GREEN 3 = DARK GREEN 4 = OTHER (Specify)
Seive: % 0	6 0 9 1 9 2 7 3 5 0 4 3 8 8
SEEDS (Dry, Mar	ure):
2 Shape:	1 = FLATTENED 2 = ANGULAR 3 = OVAL 4 = ROUNDED
3 Surface:	1 = SMOOTH 2 = DIMPLED 2 Surface: 1 = SHINY 2 = DULL 3 = WRINKLED
1 Color Pa	ttern: 1 = MONOCOLOR 2 = MOTTLED 3 = STRIPED 4 = DOTTED
2 Primary	5 = DARK GREEN 6 = BLUE-GREEN 7 = YELLOW 8 = BROWN 9 = RED
Seconda	ry Color: 10 = GRAY 11 = BLACK
2 Hilum F	1 = WHITE 2 = TAN loor Color: 1 = GREEN 2 = YELLOW 3 = ORANG
2 1 GRA	MS PER 100 SEEDS
10. DISEASE: (0	= Not Tested; 1 = Susceptible; 2 = Resistant)
2 FUSAR	IUM WILT O NEAR-WILT O DOWNY MILDEW
0 ASCOCI	HYTA BLIGHT O POWDERY MILDEW O BACTERIAL BLIGHT
0 MOSAIG	PEA ENATION MOSAIC YELLOW BEAN MOSAIC
OTHER	(Specify)
11. INSECT: (0-	Not Tested; 1 = Susceptible; 2 = Resistant)
0 APHIDS	OTHER (Specify)
12. INDICATE W	HICH VARIETY MOST CLOSELY RESEMBLES THAT SUBMITTED
СНА	RACTER NAME OF VARIETY CHARACTER NAME OF VARIETY
Leafines	Venus
Leaf Co	venus-
Pod Col Pod Sha	Vonue
COMMENTS:	Trancriavit YCHUS

EXHIBIT D--Additional Description of XP-F66 Pea

LOTUS XP-F66 is an early, mid-season, freezer pea. There are very few freezer peas to our knowledge in this season, and all are double-flowered and, thus, distinctly different than XP-F66, which is triple-flowered.

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Transfer of Plant Variety Protection Act Rights

Asgrow Seed Company, a Delaware Corporation with its principle place of business at 2605 E. Kilgore Road, Kalamazoo MI 49001, is the owner of the Plant Variety Protection Act Certificates and applications for certificates listed on and attached as Exhibit A to this document (the "Certificates and Applications").

For good and valuable consideration, reciept of which is hereby acknowledged, Asgrow hereby transfers all of its right, title and interest in and to the Certificates and Applications and to all rights relating thereto under the Plant Variety Protection Act to Seminis Vegetable Seeds, Inc., a California corporation, whose principle place of business is at 1905 Lirio Street, Saticoy, CA 93007-4206.

Dated: January 31, 1997

Asgrow Seed Company

Norman A. Braksik

President